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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,745	06/23/2003	John J. Kenny	08286.105009 DIV	8989

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EXAMINER

BELLO, AGUSTIN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/601,745	KENNY, JOHN J.	
	Examiner	Art Unit	
	Agustin Bello	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-30 is/are pending in the application.
- 4a) Of the above claim(s) 19-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/2303 3-8, 6-28-04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 12-18, drawn to a method for increasing upstream communication, classified in class 398, subclass 202.
 - II. Claims 19-22 and 27-30 drawn to a transmitter, classified in class 398, subclass 192.
 - III. Claims 23-26, drawn to a receiver, classified in class 398, subclass 208.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I, II, and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for each of the Groups is not required for all of Groups, restriction for examination purposes as indicated is proper.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

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6. During a telephone conversation with Steve Wigmore on 9/23/04 a provisional election was made with traverse to prosecute the invention of I, claims 12-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 12 is rejected under 35 U.S.C. 102(e) as being anticipated by Miyamoto (U.S. Patent No. 6,707,024).

Regarding claim 12, Miyamoto teaches receiving an optical signal that is formatted according to a network protocol and predetermined timing scheme and having a predetermined encoding (e.g. "Optical Signal" as seen in Figure 1), increasing a speed in which a detecting circuit can receive optical signals by adjusting a time constant (column 6 lines 1-6), increasing a speed in which the detecting circuit can adjust between different optical signals by adjusting a time constant (column 6 lines 7-14); increasing a speed in which a limiting circuit can convert optical signals to electrical signals by adjusting a time constant (column 6 lines 38-42); and converting the optical signals to electrical signals (e.g. via photodetector 3 in Figure 1).

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Miyamoto specifically teaches that the time constant and changes thereto dictate the tracking speed of a photodiode (column 8 lines 1-15 and column 9 lines 15-21)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto.

Regarding claims 13-15, Miyamoto differs from the claimed invention in that Miyamoto fails to specifically teach the various signal formats or encoding types claimed by the applicant. However, each of the various signal formats or encoding types claimed by the applicant are very well known in the art. Gigabit Ethernet, 8B/10B, and time division multiple access are all well known in the art of optical signal transmission and would have been obvious to one skilled in the art.

11. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto in view of Matsuda (U.S. Patent No. 6,740,861).

Regarding claims 16-18, Miyamoto teaches that the time constant of a receiver dictates the response speed of the receiver and adjustments thereto result in changes to the response speed of the receiver. However, Miyamoto differs from the claimed invention in that Miyamoto fails to specifically teach increasing the speed of the receiver by decreasing the capacitance and thereby decreasing the time constant. However, such a method is well known in the art. Matsuda teaches increasing the receiving speed of a receiver by decreasing the capacitance and

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thereby decreasing the time constant (column 1 lines 16-26). One skilled in the art would have been motivated to decrease the capacitance and thereby decrease the time constant in order to increase the elements ability to receive an optical signal. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to decrease the capacitance and thereby decrease the time constant in the device of Miyamoto as taught by Matsuda.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lemon presents relevant art.

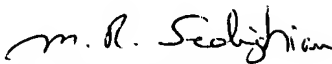
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Agustin Bello
Examiner
Art Unit 2633

AB


M. R. SEDIGHIAN
PRIMARY EXAMINER